DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005811 Address: 333 Burma Road **Date Inspected:** 21-Mar-2009

City: Oakland, CA 94607

OSM Arrival Time: 1845 **Project Name:** SAS Superstructure **OSM Departure Time:** 645 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Li Jia **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

Summary of Items Observed: On this date Caltrans OSM Quality Assurance (QA) Inspector, Larry Viars was present during the times noted above for observations relative to the work being performed.

Bay 9-

Gantry 2 / PMT 1

The first Production Monitoring Test for DP267-001 and DP483-001 was rejected by ZPMC QC Li Jia. ABF QC and Caltrans QA were in agreement that PMT # 1 was rejected for overlap exceeding 100 mm on weld joint #6. Please see the pictures of the overlap area below.

Gantry 2 / PMT 2

The Caltrans QA Inspector monitored the OBG Production Monitoring Test (PMT) for Deck Panels DP267-001 (11CW) and 483-001 (11CE). The Caltrans QA inspector recorded amperage, voltage and travel speed of the Gas metal Arc Welding (GMAW) root pass and the Submerged Arc Welding (SAW) cover pass. A Visual inspection of the fit up, tack welds, root pass and cover pass was performed by ZPMC QC Sun Bo, American Bridge Flour (ABF) Cao Hai Zhou and the Caltrans QA. The Caltrans QA observed ZPMC QC Xue Hai Rong perform Ultrasonic testing of the Partial Joint Penetration weld for depth of penetration. Mr. Tang found the depth of penetration of the PMT welds to be in compliance with contract documents. The Caltrans QA inspector designated

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

locations for Macroetch samples (15 locations). Macroetch samples were evaluated with a 7x optical comparator and accepted by ZPMC QC, ABF QC and the Caltrans QA Inspector.

The Caltrans QA recorded the following results of tack weld MT by ZPMC QC on DP267-001 and DP483-001.

DP276-001: 290 tack welds with 1 indications found by ZPMC QC.

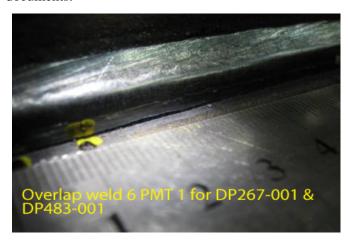
DP401-001: 290 tack welds with 5 indications ZPMC OC.

ZPMC performed MT of excavation of indication areas areas of tack welds for DP371-001 and DP401-001 and found them to be acceptable.

Bay 7-

This QA inspector performed Ultrasonic Testing (UT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as H shapes for OBG side plate stiffeners. The weld identification numbers are as follows: SP140-001-047, 049, SP326-001-041, 043, SP113-001-050, 052, SP353-001-051, 053, SP380-001-043, 045 and SP167-001-041, 051, 053.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

As identified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150 0042 2372, who represents the Office of Structural Materials for your project.

Inspected By:

Viars, Larry

Quality Assurance Inspector

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Reviewed By: QA Reviewer Carreon, Albert